

Attorney Docket No.: US 1292/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

February 25, 2002

Peter M. THULÉ, M.D.

Serial No.:

09/972,916

Filed:

October 10, 2001

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Group Art Unit: 1614

For:

GLUCOSE SENSITIVE REGULATOR

OF INSULIN TRANSCRIPTION

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents Washington, D.C. 20231

Dear Sir:

Pursuant to 37 CFR 1.56 and 1.97-1.98, Applicant submits herewith copies of various references for the Examiner's consideration. These references include those cited in the application as "REFERENCES". (It is noted that Reference Nos. 34 and 38 refer to the same article.)

The Examiner is respectfully requested to review and officially consider and make the references of record before issuing the first Office Action in connection with this case.

S.N. 09/972,916

A completed PTO form 1449B/PTO listing the references thereon together with

copies of same is enclosed herewith. The Examiner is respectfully requested to return

an initialed copy of PTO form 1449B/PTO along with the next communication in

connection with this case.

It is believed that no fee is due for this submission. Should that determination be

incorrect, however, the Examiner is hereby authorized to charge any deficiencies to our

Deposit Account No. 01-0433, and notify the undersigned in due course.

Should the Examiner have any questions or wish to discuss further this matter,

please contact the undersigned at the telephone number provided below.

Respectfully submitted,

DINESH AGARWAL

Attorney for Applicant(s)

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EXAMINER: Initial if reference considered, whether or not citation is in confomance with MPEP 609. Draw line through citation if not in confomance and not considered. Include copy of this form with next communication to applicant.

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.1 ⁶ if possibile. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials'	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Item (book), magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Publisher, country, where published, source.	T²
		Thulé, P. M. and Liu, J., Glucose Regulated Hepatic Production of Human	
		Insulin Ameliorates Hyperglycemia in Streptozotocin Treated Rats.	
		Presented at the American Society of Gene Therapy,	
		2 nd Annual Meeting, Washington, D.C., June 9-13, 1999, 1 page.	<u> </u>
		Thulé, P. M. and Liu, J., <u>Glucose-regulated human insulin production from hepatocytes in STZ-treated rats: a model of insulin gene therapy</u> . Presented at 59 th Annual Meeting, American Diabetes Association, June 19-22, 1999,	
	***************************************	published as Supplement to Diabetes, May 1999, 1 page.	
		Thulé, P. M. and Liu, J., <u>Regulated Production of Insulin from Hepatocytes in Primary Cultures</u> . Oral Presentation, American Diabetes Associated, 58 th Annual Scientific Sessions, Chicago, Illinois, June 1998, 1 page.	
		Thulé, P. M. <u>Glucose-Regulated Human Insulin Production from Hepatocytes in STZ-Treated Rats: A Model of Insulin Gene Therapy</u> . Diabetes 48 Supplement (1): A0246, June 19-22, 1999.	
		Thulé, P. M. and Liu, J., <u>Regulated Production of Insulin from Hepatocytes in Primary Cultures</u> , Diabetes 47 Supplement (1): A0263, June 13-16, 1998.	
		Thulé, P. M., Liu, J. and Phillips, L. S. <u>Glucose Regulated Production of Human Insulin in Rat Hepatocytes</u> , submitted to Journal of Biological Chemistry (Jan. 1999), but rejected.	
		Thulé, P. M., Liu, J. and Phillips L. S. <u>Glucose regulated production of human insulin in rat Hepatocytes</u> , Gene Therapy 2000, 7(3):205-214.	
		Thulé, P. M. and Liu, J., <u>Regulated hepatic insulin gene therapy of STZ-diabetic rats</u> , Gene Therapy 2000, 7:1744-1752.	

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¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

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		Eisenbarth GS. Type I diabetes mellitus: A chronic autoimmune disease. N Engl J Med	
		1986; 314:1360-1368.	
		Falqui L, Martinenghi S, Severini GM, et al. Reversal of diabetes in mice by	
		implantation of human fibroblasts genetically engineered to release mature human insulin. Human Gene Therapy 1999; 10:1753-1762.	
		Muzzin P, Eisensmith RC, Copeland KC, Woo SLC. <u>Hepatic insulin gene expression as treatment for Type 1 diabetes mellitus in rats</u> . Mol Endo 1997; 11(6):833-837	
		Gros L, Riu E, Montoliu L, Ontiveros M, Lebrigand L, Bosch F. <u>Insulin production</u> by engineered muscle cells. Human Gene Therapy 1999; 10:1207-1217.	-
		Short DK, Okada S, Yamauchi K, Pessin JE. <u>Adenovirus-mediated transfer of a modified human proinsulin gene reverses hyperglycemia in diabetic mice</u> . American Journal of Physiology 1998; 275:E748-E756.	
	:	Rivera VM, Wang W, Wardwell S, et al. Regulation of protein secretion through controlled aggregation in the endoplasmic reticulum. Science 2000; 287:826-830.	
		Selden RF, Skoskiewicz MJ, Russell PS, Goodman HM. Regulation of insulin-gene expression. N Engl J Med 1987; 317:1067-1076.	
		Kolodka TM, Finegold M, Moss L, Woo SLC. Gene therapy for diabetes mellitus in rats by hepatic expression of insulin. Proc Natl Acad Sci USA 1995; 92:3293-3297.	
		Tuch BE, Tabiin MT, Casamento FM, Simpson AM, Marshall GM. <u>Transplantation of genetically engineered insulin-producing Hepatocytes into immunoincompetent mice</u> . Transplantation Proceedings 1998; 30:473.	
		Valera A, Fillat C, Costa C, et al. Regulated expression of human insulin in the liver of transgenic mice corrects diabetic alterations. FASEB J 1994; 8(6):440-447.	
		Kaneda Y, Iwai K, Uchida T. <u>Introduction and expression of the human insulin gene in adult rat liver</u> . Journal of Biological Chemistry 1989; 264(21):12126-12129.	

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Examiner Initials'	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Item (book), magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Publisher, country, where published, source.	T ²
		Yamaguchi M, Kuzume M, Matusumoto T, et al. <u>Insulin gene transfer compensates</u> pancreatic β-cell function in diabetic rats. Transplantation Proceedings 1998; 30:2913.	
		Sugiyama A, Hattori S, Tanaka S, et al. <u>Defective adenoassociated viral-mediated transfection of insulin gene by direct injection into liver parenchyma decreases blood glucose of diabetic mice</u> . Hormone and Metabolic Research 1997; 29(12):599-603.	ļ
		Abai A, Hobart P, Barnhart KM. <u>Insulin Delivery with Plasmid DNA</u> . Human Gene Therapy 1999; 10:2637-2649.	
		Lu D, Tamemoto H, Shibata H, Saito I, Takeuchi T. Regulatable production of insulin from primary-cultured hepatocytes: insulin production is up-regulated by glucagon and cAMP and down-regulated by insulin. Gene Therapy 1998; 5(7):888-895.	
		Gros L, Montoliu L, Riu E, Lebrigand L, Bosch F. Regulated production of mature insulin by non-b-cells. Human Gene Therapy 1997; 8(18):2249-2259.	
		Wanke IE, Wong NC. Specific problems facing gene therapy for insulin-dependent diabetes mellitus: glucose-regulated insulin secretion from hepatocytes. Proceeding of the Western Pharmacology Society 1997; 40:131-133.	
		Simpson AM, Marshall GM, Tuch BE, et al. <u>Gene therapy of diabetes: glucosestimulated insulin secretion in a human hepatoma cell line (HEP G2ins/g)</u> . Gene Therapy 1997; 4:1202-1215.	
		Powell DR, Suwanichkul A, Cubbage M, Lee PDK. Regulation of insulin-like growth factor binding protein-1 (IGFBP-1) protein levels, mRNA levels and promoter activity by insulin (IN) and IGF-1 in HepG2. Endo Society 1990:280A.	
ALIJII WALANGA WALANGA MININGA MARANGA		Powell DR, Suwanichkul A, Cubbage ML, DePaolis LA, Snuggs MB, Lee PDK. <u>Insulin inhibits transcription of the human gene for insulin-like growth factor-binding protein-1</u> . Journal of Biological Chemistry 1991; 266:18868-18876.	
		Powell DR, Suwanichkul A. <u>HNF1 activates transcription of the human gene for insulin-like growth factor binding protein-1</u> . DNA and Cell Biology 1993; 12:283-289.	
		Suwanichkul A, Cubbage ML, Powell DR. The promoter of the human gene for insulin-like growth factor binding protein-1. <u>Basal promoter activity in HEP G2 cells depends upon liver factor B1</u> . Journal of Biological Chemistry 1990; 265:21185-21193.	

		
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¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Examiner Item (book), magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Initials' Publisher, country, where published, source. Suwanichkul A, DePaolis LA, Lee PDK, Powell DR. Identification of a promoter element which participates in cAMP-stimulated expression of human insulin-like growth factorbinding protein-1. Journal of Biological Chemistry 1993; 268:9730-9736. Suwanichkul A, Morris SL, Powell DR. Identification of an insulin-responsive element in the promoter of the human gene for insulin-like growth factor binding protein-1. Journal of Biological Chemistry 1993; 268:17063-17068. Suwanichkul A, Allander SV, Morris SL, Powell DR. Glucocorticoids and insulin regulate expression of the human gene for insulin-like growth factor-binding protein-1 through proximal promoter elements. Journal of Biological Chemistry 1994; 269:30835-30841. Hughes SD, Johnson JH, Quaade C, Newgard CB. Engineering of glucose-stimulated insulin secretion and biosynthesis in non-islet cells. 1992; 89:688-692. Rencurel F, Waever G, Antoine B, et al. Requirement of glucose metabolism for regulation of glucose transporter type 2 (GLUT 2) gene expression in liver. Biochemical Journal 1996; 314:903-909. Villafuerte BC, Goldstein S, Murphy LJ, Phillips LS. Nutrition and Somatomedin XXV. Regulation of insulin-like growth factor binding protein-1 in primary cultures of normal rat hepatocytes. Diabetes 1991; 40:837-841. Ooi GT, Tseng LY-H, Tran MQ, Rechler MM. Insulin rapidly decreases insulin-like growth factor-binding protein-1 gene transcription in streptozotocin-diabetic rats. Molecular Endocrinology 1992; 6:2219-2228. Pao C-I, Farmer PK, Begovic S, Goldstein S, Wu G-J, Phillips LS. Expression of hepatic insulin-like growth factor-I and insulin-like growth factor-binding protein-1 genes is transcriptionally regulated in streptozotocin-diabetic rats. Molecular Endocrinology 1992; 6:969-977. Suh D-S, Zhou Y, Ooi GT, Rechler MM. Dexamethasone stimulation of rat insulin-like growth factor binding protein-1 (IGFBP-1) promoter activity involves the interaction of multiple transcription factors. Progress in Growth Factor Research 1995; 6:131-140. Cuif M-H, Cognet M, Boquet D, Tremp G, Kahn A, Vaulont S. Elements responsible for hormonal control and tissue specificity of L-type pyruvate kinase gene expression in transgenic mice. Molecular and Cellular Biology 1992; 12:4852-4861. Cognet M, Lone YC, Vaulont S, Kahn A, Marie J. Structure of the rat L-type pyruvate kinase gene. J Mol Biol 1987; 196:11-25.

Attorney Docket Number

Examiner	Date	
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Examiner Initials'	Item (book), magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Publisher, country, where published, source.				
		Bergot M-O, Diaz-Guerra M-JM, Puzenat N, Raymondjean M, Kahn A. <u>Cisregulation of the L-type pyruvate kinase gene promoter by glucose, insulin and cyclic AMP</u> . Nucleic Acids Research 1992; 20(8):1871-1878.			
		Vaulont S, Munnich A, Decauz J-F, Kahn A. <u>Transcriptional and post-transcriptional regulation of L-type pyruvate kianse gene expression in rat liver</u> . Journal of Biological Chemistry 1986; 261:7621-7625.			
		Goswami R, Lacson R, Unterman T. <u>Identification of insulin and glucocorticoid response sequences in the rat IGF binding protein-1 (IGFBP-1) promoter.</u> Endocrine Society 1993; 1915B:529.			
		Shu D-S, Ooi GT, Lesniak MAS. <u>Inhibition of IGFBP-1 gene expression by insulin and stimulation by dexamethasone, cyclic amp, and phorbol esters are mediated by different cis-acting elements in the rat IGFBP-1 promoter.</u> Endocrine Society 1993; 1916B:529.			
		Smeekens SP, Chan SJ, Steiner DF. The biosynthesis and processing of neuroendocrine peptides: identification of proprotein convertases involved in intravesicular processing. Progress in Brain Research 1992; 92:235-246.			
		Groskreutz DJ, Sliwkowski MX, Gorman CM. Genetically engineered proinsulin constitutively processed and secreted as mature, active insulin. Journal of Biological Chemistry 1994; 269(8):6241-6245.			
		Steiner DF, Smeekens SP, Ohagi S, Chan SJ. The New Enzymology of Precursor Processing Endoproteases. Journal of Biological Chemistry 1992; 267:23435-23438.			
		Simonson GD, Groskreutz DJ, Gorman CM, MacDonald MJ. <u>Synthesis and processing of genetically modified human proinsulin by rat myoblast primary cultures</u> . Human Gene Therapy 1996; 7:71-78.			
		Unger RH, Foster DW. Chapter 21. In: Wilson JD, Foster DW, Kronenberg HM, Williams RH, eds. Williams Textbook of Endocrinology. Vol. 9th. Philadelphia, London, Toronto, Montreal, Sydney: W.B Saunders Co., 1998:973-1059.			
		Robertson DG, Marino EM, Thule PM, Seneviratne CK, Murphy LJ. <u>Insulin and glucocorticoids regulate IGFBP-1 expression via a common promoter region</u> . Biochemical Biophysical Research Communications 1994; 200(1):226-232.			
		Goswami R, Lacson R, Yang E, Sam R, Unterman T. <u>Functional analysis of glucocorticoid and insulin response sequences in the rat insulin-like growth factor-binding protein-1 promoter</u> . Endocrinology 1994; 134:736-743.			

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	Suh DS, Ooi GT, Rechler MM. <u>Identification of cis -elements mediating the stimulation of rat insulin-like growth factor-binding protein-1 promoter activity by dexamethasone, cyclic adenosine 3',5'-monophosphate, and phorbol esters, and inhibition by insulin. Molecular Endocrinology 1994; 8:794-805.</u>					
		Goldstein S, Sertich G, Levan KR, Phillips LS. <u>Nutrition and somatomedin. XIX.</u> <u>Molecular regulation of insulin-like growth factor-l in streptozotocin-diabetic rats.</u> Molecular Endocrinology 1988; 2:1093-1100.				
		Minematsu S, Watanabe M, Tsuchiya N, Amagaya S. <u>Diurnal variations in blood chemical items in Sprague-Dawley rats</u> . Experimental Animals 1995; 44:223-232.				
and the second s		Haughton CL, Dillehay DL, Phillips LS. <u>Insulin replacement therapy for the rat model of streptozotocin-induced diabetes mellitus</u> . Laboratory Animal Science 1999; 49:639-644.				
		Koopmans SJ, Sips HCM, Krans HMJ, Radder JK. <u>Pulsatile intravenous insulin replacement in streptozotocin-diabetic rats is more efficient than continuous delivery:effects on glycaemic control, insulin-mediated glucose metabolism and lipolysis.</u> Diabetologia 1996; 39:391-400.				
		Wang RN, Bouwens L, Kloeppel G. <u>Beta-cell proliferation in normal and streptozotocin-treated newborn rats: site, dynamics and capacity</u> . Diabetologia 1994; 37:1088-1096.				
		Like AA, Guberski DL, Butler L. <u>Influence of Environmental Viral Agents on Frequency and Tempo of Diabetes Mellitus in BB/Wor Rats</u> . Diabetes 1991; 40:259-262.				
North Model (A)		Seglen PO. Preparation of rat liver cells. III. <u>Enzymatic requirements for tissue dispersion</u> . Exp Cell Res 1973; 82:391-398.				
		Ginot F, Decaux J-F, Cognet M, et al. <u>Transfection of hepatic genes into adult rat hepatocytes in primary culture and their tissue-specific expression</u> . Eur J Biochem 1989; 180:289-294.				
		Baker A, Saltik M, Lehrmann H, et al. <u>Polyethylenimine</u> (PEI) is a simple, inexpensive and effective reagent for condensing and linking plasmid DNA to adenovirus for gene delivery. Gene Therapy 1997; 4:773-782.				
		Marriott D, Gillece-Castro B, Gorman CM. <u>Prohormone convertase-1 will process</u> <u>prorelaxin, a member of the insulin family of hormones</u> . Molecular Endocrinology 1992; 6:1441-1450.				

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		Mittereder N, March KL, Trapnell BC. <u>Evaluation of the concentration and bioactivity of adenovirus vectors for gene therapy</u> . Journal of Virology 1996; 70:7498-7509.	
		Alam T. Reduction in diabetic hyperglycemia by glucose-regulated insulin release from transduced hepatocytes. University of Wisconsin Department of Surgery (Undated). (4 pages) Web site: http://www.surgery.wisc.edu/research/txlab ta-rotrf.html.	
		Bloomgarden, Z. New approaches to insulin treatment and glucose monitoring. (American Diabetes Association Annual Meeting, 1999. Diabetes care 22(12):2078. (13 pages)	***************************************
		Ferber S, Halkin A, Cohen H, Ber I, Einav Y, Goldberg I, Barshack I, Seijffers R, Kopolovic J, Kaiser N, Karasik A. <u>Pancreatic and duodenal homebox gene 1 induces expression of insulin genes in liver and ameliorates streptozotocininduced hyperglycemia</u> . Nature medicine May 2000; 6(5):568-572.	
		Institute of Human Gene Therapy, University of Pennsylvania Health System. <u>Prospects in gene therapy</u> . March 11, 1999. (4 pages) Web site: http://med.upenn.edu/ihgt/info/prospcts.html .	
		Leibiger B, Moede T, Schwarz T, Brown G.R., Köhler M, Leibiger I.B., Berggren, P-O. Short-term regulation of insulin gene transcription by glucose. Proceedings of the National Academy of Sciences 1998; 95(16):9307-9312.	
		National Institutes for Diabetes & Digestive & Kidney Diseases. <u>Diabetes statistics</u> . National Diabetes Information Clearinghouse, NIH Publication No. 99-3892, March 1999. (11 pages) Web site: http://www.niddk.nih.gov/health/diabetes/pubs/dmsats/dmstats.htm#what .	
		Osborne W, Barry, S. <u>Glucose-regulated insulin expression in diabetic rats</u> . Molecular therapy May 2000; 1(5):S27-S31. (2 pages)	
		Rajan, A. <u>An update on islet cell replacement</u> . American Diabetes Association's 59 th Scientific Session, Day 4, June 22, 1999. (6 pages) Web site: http://www.islet.org/forum/messages/8637.htm .	

Examiner	Date	
Signature	Considered	

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

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		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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Simpson AM, Tuch BE, Swan MT, Tu J, Marshall GM. <u>Functional expression of human insulin gene in a human hepatoma-cell line (hep g2)</u> . Gene therapy 2(3):223-231.					
		Tomita N, Oghihara T, Kondo T, Kanyeda Y. A novel gene-transfer technique mediated by HVJ (Sendai virus), nuclear-protein and liposomes. Cancer detection and prevention 1994; 18(6):485-491.			
		Wanke I. <u>Diabetes scene - gene therapy for diabetics</u> ? (1 page) Web site: http://www.banting.com/tcenter/gene.html .			
		Woo S, Lernmark A. <u>Gene therapy approaches for diabetes and its complications: summary and recommendations</u> . NIDDK Conference Reports and Archives, November 8-9, 1999. (5 pages) Web site: http://www.niddk.nij.gov/fund/reports/gene_therapy_summ.htm .			
		Zhdanov, R. Laboratory of Gene Therapeutics. Institute of Biochemical Chemistry, Russian Academy of Medical Sciences. (7 pages) Web site: http://www.ibmh.msk.su/depart/gene.htm .			
		Impact of Diabetes. (2 pages) Web site: http://www.diabetesinstitute.org			
		Background on Diabetes. (3 pages) Web site: http://www.diabetesinstitute.org			
		Woo S., Professor and Director, Institute for Gene Therapy and Molecular Medicine, Professor, Department of Human Genetics, Mount Sinai School of Medicine, New York, New York. (3 pages)			

		
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